

Title (en)  
SELECTIVE LASER SINTERING PROCESS (SLS) FOR PRODUCING ANTIBIOTIC-ELUTING MEDICAL IMPLANTS

Title (de)  
SELEKTIVES LASERSINTERVERFAHREN (SLS) ZUR HERSTELLUNG VON ANTIBIOTIKA-FREISETZENDEN MEDIZINISCHEN IMPLANTATEN

Title (fr)  
PROCÉDÉ DE FRITTAGE AU LASER SÉLECTIF (SLS) POUR LA PRÉPARATION D'IMPLANTS MÉDICAUX À ÉLUTION D'ANTIBIOTIQUES

Publication  
**EP 3122393 B1 20200422 (EN)**

Application  
**EP 15768793 A 20150320**

Priority

- US 201461969945 P 20140325
- CA 2015050211 W 20150320

Abstract (en)  
[origin: WO2015143553A1] An antibiotic-eluting article for implantation into a mammalian subject, produced by an additive manufacturing process wherein a polymeric material is concurrently deposited with a selected antibiotic. The additive manufacturing process may be a selective laser sintering process or a selective laser melting process or a selective heat sintering process or an electron beam melting process. The antibiotic-eluting article may be temporary or permanent orthopaedic skeletal component, an orthopaedic articulating joint replacement component, and/or an external hard-shell casing for an implantable device. One or more bone-growth-promoting compositions may be concurrently deposited with the polymeric material. The implantable device may be a cardiac pacemaker, a spinal cord stimulator, a neurostimulation system, an intrathecal drug pump for delivery of medicants into the spinal fluid, and infusion pump for delivery of chemotherapeutics and/or anti-spasmodics, an insulin pump, an osmotic pump, and a heparin pump.

IPC 8 full level  
**A61L 27/44** (2006.01); **A61K 9/00** (2006.01); **A61K 31/7036** (2006.01); **A61K 38/14** (2006.01); **A61K 47/30** (2006.01); **A61L 27/54** (2006.01); **A61P 31/04** (2006.01)

CPC (source: EP US)  
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